IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Teck Kheng Lee

Serial No.: Not Yet Assigned

Filed: April 22, 2004

For: METHODS FOR ASSEMBLY AND

PACKAGING OF FLIP CHIP

CONFIGURED DICE WITH INTERPOSER

Confirmation No.: Unknown

Examiner: Unknown

Group Art Unit: Unknown

Attorney Docket No.: 2269-4974.2US

(00-0693.02/US)

NOTICE OF EXPRESS MAILING

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Person making Deposit: Christopher Haughton

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The present application is a divisional of application Serial No. 10/150,901, filed May 17, 2002, pending, which is related to U.S. Patent Application Serial No. 09/944,465 filed August 30, 2001 and entitled MICROELECTRONIC DEVICES AND METHODS OF MANUFACTURE, and to the following U.S. Patent Applications also filed May 17, 2002: Serial No. 10/150,893, entitled INTERPOSER CONFIGURED TO REDUCE THE PROFILES OF SEMICONDUCTOR DEVICE ASSEMBLIES AND PACKAGES INCLUDING THE SAME AND METHODS; Serial No. 10/150,892, entitled METHOD AND APPARATUS FOR FLIP-CHIP PACKAGING PROVIDING TESTING CAPABILITY; Serial No. 10/150,516, entitled

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SEMICONDUCTOR DIE PACKAGES WITH RECESSED INTERCONNECTING STRUCTURES AND METHODS FOR ASSEMBLING THE SAME; Serial No. 10/150,653, entitled FLIP CHIP PACKAGING USING RECESSED INTERPOSER TERMINALS; and Serial No. 10/150,902, entitled METHOD AND APPARATUS FOR DIELECTRIC FILLING OF FLIP CHIP ON INTERPOSER ASSEMBLY.

Pursuant to M.P.E.P. 2001.06(b), the Examiner is respectfully requested to consider the information of record in the prior applications, and to confirm in the first Office Action on the merits that such art has in fact been reviewed. A PTO-1449 form listing all of the information of record in the prior applications is enclosed herewith.

This Information Disclosure Statement is filed within three (3) months of the filing date of the above-identified application, and no certification pursuant to 37 C.F.R. § 1.97(c) or a fee pursuant to 37 C.F.R. 1.17(p) is required.

Respectfully submitted,

Tunt BITC

Trent N. Butcher, P.E. Registration No. 51,518

Attorney for Applicant(s)

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Date: April 22, 2004

TNB/ps:ljb

Enclosures: Form PTO-1449

Document in ProLaw

Sheet 1 of 9

Form PTO-1449				Docket Number (Option 2269-4974.2US	Application Number Not Yet Assigned						
INFORMATION DISCLOSURE CITATION IN AN APPLICATION				(00-0693.02/US) Applicant Teck Kheng Lee							
(Use several sheets if necessary)				Filing Date April 22, 2004		Group Art Unit Unknown					
		U.S.	PATENT	DOCUMENTS							
EXAMINER INITIAL				NAME	CLASS	SUBCLASS	FILING DA				
	4,807,021	4,807,021 02/1989		Okumura							
	5,347,159	09/1994	Kh	nandros et al.							
	5,366,794	11/1994		Nakao							
	5,385,869	01/1995		Liu et al.							
	5,386,341	01/1995		Olson et al.							
	5,397,921 03/1995			Karnezos							
	5,409,865 04/1995			Karnezos							
	5,422,205	06/1995		Inoue et al.							
	5,438,477	08/1995		Pasch							
	5,448,511	09/1995	. P	aurus et al.							
	5,504,277	04/1996		Danner							
		FOREIG	N PATEN	IT DOCUMENTS							
	DOCUMENT NUMBER	DATE		APPLICANT	CLASS	SUBCLASS	Trans	slation			
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	WO 99/65282	12/1999		Eide	 		<u> </u>				
	JP 2002-028702/04	09/1999	Katsumasa		<u> </u>						
	JP 2000-183082 06/2000		<u> </u>	Hitachi Ltd.							
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				ROELECTRONIC DEV 01, Serial No. 09/944			OF	:			
	ISAAK, H. et al., "Development of Flex Stackable Carriers" IEEE Electronic Components and Technology Conference, 2000 Proceedings 50th, 5/21/2000-5/24/2000, Las Vegas, NV, USA, pp. 378-84, IEEE Catalog No: 00CH37070.										
	Copy of Australian Patent Office, Search Report, 30 May 2003, 4 pages.										
EXAMINER				DATE CONSIDERED							
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Sheet 2 of 9 Form PTO-1449 Docket Number (Optional) Application Number 2269-4974.2US **Not Yet Assigned** INFORMATION DISCLOSURE CITATION (00-0693.02/US) IN AN APPLICATION Applicant Teck Kheng Lee (Use several sheets if necessary) Filing Date April 22, 2004 Group Art Unit Unknown **U.S. PATENT DOCUMENTS EXAMINER** DOCUMENT FILING DATE IF APPROPRIATE DATE CLASS SUBCLASS NAME INITIAL NUMBER 5,598,033 01/1997 Behlen et al. 07/1997 5,646,446 Nicewarner, Jr. et al. 5,663,530 09/1997 Schueller et al. 09/1997 5,668,405 Yamashita 5,674,785 10/1997 Akram et al. 5,697,148 Lance, Jr. et al. 12/1997 5,710,071 01/1998 Beddingfield et al. 5,719,449 02/1998 **Strauss** 5,721,151 02/1998 Padmanabhan et al. 5,739,585 04/1998 Akram et al. 5.747.982 05/1998 Dromgoole et al. FOREIGN PATENT DOCUMENTS Translation DOCUMENT NUMBER DATE COUNTRY CLASS SUBCLASS NO YES **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) DATE CONSIDERED **EXAMINER**

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION				Docket Number (Optional) 2269-4974.2US (00-0693.02/US)		Application Number Not Yet Assigned			
IN AN APPLICATION (Use several sheets if necessary)				Applicant Teck Kheng Lee					
				Filing Date April 22, 2004		Group Art Unit Unknown			
		U.S. I	PATENT I	DOCUMENTS		-			
EXAMINER INITIAL	DOCUMENT NUMBER	DATE		NAME	CLASS			FILING DATE IF APPROPRIATE	
	5,752,182	05/1998	Nakatsuka et al.						
	5,758,413	06/1998	Chong et al.						
	5,798,285	08/1998	Bentlage et al.						
	5,798,567	08/1998	Kelly et al.						
	5,805,422	09/1998	Otake et al.						
	5,818,113	10/1998		lseki et al.					
	5,834,338	11/1998	Та	akeda et al.					
	5,834,366	11/1998	Akram						
	5,834,848	11/1998	lwasaki						
	5,835,355	11/1998		Dordi					
	5,843,808	12/1998		Karnezos					
	_	FOREIG	N PATEN	IT DOCUMENTS	3				
DOCUMENT				00,400			Translation		
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Application Number Form PTO-1449 **Docket Number (Optional)** 2269-4974.2US **Not Yet Assigned** INFORMATION DISCLOSURE CITATION (00-0693.02/US) IN AN APPLICATION Applicant Teck Kheng Lee (Use several sheets if necessary) Group Art Unit Unknown Filing Date April 22, 2004 **U.S. PATENT DOCUMENTS** FILING DATE IF APPROPRIATE **EXAMINER** DOCUMENT CLASS SUBCLASS DATE NAME INITIAL NUMBER 5,844,168 12/1998 Schueller et al. 5,866,953 02/1999 Akram et al. 03/1999 Ohki et al. 5,886,408 5,891,753 04/1999 Akram 5,898,224 04/1999 Akram 5,973,389 10/1999 Culnane et al. 5,973,404 10/1999 Akram et al. 5,977,640 11/1999 Bertin et al. 11/1999 5,982,030 MacIntrye 5,984,691 11/1999 Brodsky et al. 5,990,545 11/1999 Schueller et al. **FOREIGN PATENT DOCUMENTS** Translation DOCUMENT COUNTRY CLASS SUBCLASS DATE NUMBER NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) DATE CONSIDERED **EXAMINER** EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

Sheet 5 of 9 Form PTO-1449 Docket Number (Optional) Application Number 2269-4974.2US Not Yet Assigned INFORMATION DISCLOSURE CITATION (00-0693.02/US) IN AN APPLICATION Applicant Teck Kheng Lee (Use several sheets if necessary) Group Art Unit Unknown Filing Date April 22, 2004 **U.S. PATENT DOCUMENTS** DOCUMENT NUMBER EXAMINER FILING DATE SUBCLASS CLASS DATE NAME IF APPROPRIATE 5,991,161 11/1999 Samaras et al. 6,005,776 12/1999 Holman et al. 12/1999 6,008,543 lwabuchi 6,011,694 01/2000 Hirakawa 01/2000 6,013,948 Akram et al. 6,020,629 02/2000 Farnworth et al. 02/2000 6,024,584 Lemke et al. 6,027,346 02/2000 Sinsheimer et al. 6,028,365 02/2000 Akram et al. 6,034,427 03/2000 Lan et al. 6,039,889 03/2000 Zhang et al. FOREIGN PATENT DOCUMENTS DOCUMENT CLASS SUBCLASS DATE COUNTRY NUMBER NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) DATE CONSIDERED **EXAMINER** EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through

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Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)
2269-4974.2US
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Application Number Not Yet Assigned

Applicant Teck Kheng Lee

Filing Date April 22, 2004

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		U.S. P	ATENT DOCUMENTS				
EXAMINER INITIAL	DOCUMENT DATE		NAME	CLASS	SUBCLASS	FILING DATE	
	6,040,630	03/2000	Panchou et al.				
	6,050,832	04/2000	Lee et al.				
	6,057,178	05/2000	Galuschki et al.				
	6,060,782	05/2000	Ohsono et al.				
	6,064,114	05/2000	Higgins, III				
	6,072,233	06/2000	Corisis et al.			<u> </u>	
	6,074,897	06/2000	Degani et al.				
	6,075,710	06/2000	Lau		_		
 	6,079,991	06/2000	Lemke et al.				
	6,093,035	07/2000	Lemke et al.	_			
	6,116,921	09/2000	Scholz et al.				
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Sheet 7 of 9 **Docket Number (Optional)** Form PTO-1449 Application Number 2269-4974.2US **Not Yet Assigned** INFORMATION DISCLOSURE CITATION (00-0693.02/US) IN AN APPLICATION Applicant Teck Kheng Lee (Use several sheets if necessary) Group Art Unit Unknown Filing Date April 22, 2004 **U.S. PATENT DOCUMENTS** EXAMINER INITIAL DOCUMENT NUMBER FILING DATE IF APPROPRIATE DATE NAME CLASS SUBCLASS 09/2000 Cardot et al. 6,124,631 10/2000 6,127,736 Akram 6,137,062 10/2000 Zimmerman 10/2000 Yew et al. 6,137,164 6,137,183 10/2000 Sako Hacke 6,157,541 12/2000 12/2000 Gaynes et al. 6,165,885 6,172,422 B1 01/2001 Chigawa et al. 01/2001 6,179,598 B1 Brand 6,191,487 B1 02/2001 Rodenbeck et al. 6,208,521 B1 03/2001 Nakatsuka **FOREIGN PATENT DOCUMENTS** Translation DOCUMENT NUMBER CLASS SUBCLASS DATE COUNTRY NO YES OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

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Sheet 8 of 9 Application Number Form PTO-1449 **Docket Number (Optional)** 2269-4974.2US **Not Yet Assigned** INFORMATION DISCLOSURE CITATION (00-0693.02/US) IN AN APPLICATION Applicant Teck Kheng Lee (Use several sheets if necessary) Filing Date April 22, 2004 Group Art Unit Unknown **U.S. PATENT DOCUMENTS** EXAMINER DOCUMENT FILING DATE CLASS SUBCLASS DATE NAME INITIAL NUMBER IF APPROPRIATE 6,212,768 B1 04/2001 Murakami 6,214,156 B1 04/2001 Takano et al. 04/2001 6,218,202 B1 Yew et al. 6,219,911 B1 04/2001 Estes et al. 6,221,763 B1 04/2001 Gilton et al. 6,225,688 B1 05/2001 Kim et al. 05/2001 Yoneda 6,229,711 B1 6,262,895 B1 07/2001 **Forthun** 09/2001 Saitoh 6,291,775 B1 6,294,455 B1 09/2001 Ahn 6,300,679 B1 10/2001 Mukerji et al. FOREIGN PATENT DOCUMENTS Translation DOCUMENT DATE COUNTRY CLASS SUBCLASS NUMBER YES NO **OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER** DATE CONSIDERED

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_		U.S.	PATENT	DOCUMENTS					
EXAMINER INITIAL	DOCUMENT NUMBER DATE			NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
	6,310,288 B1	6,310,288 B1 10/2001		Moden					
	6,323,060 B1 11/2001 6,413,102 B2 07/2002 6,429,516 B1 08/2002 6,432,737 B1 08/2002			Isaak					
				Jiang et al.					
				Tsunoi					
				Webster					
	2002/0167092 A1	11/2002	Fee et al.			<u>.</u>			
	6,489,687 B1	12/2002	Hashimoto Imasu et al.						
	6,492,737 B1	12/2002							
	6,518,677 B1 02		С	apote et al.					
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